

Appl. No. 09/997,347
Amdt. Dated September 27, 2004
Reply to Office action of June 21, 2004

REMARKS

The Examiner has rejected claims 23-33, Applicant has further amended claims 24 and 28 as suggested by the Examiner and has also amended claims 23 and 34 to clarify the invention of the subject application. Claims 23-33 remain pending in the application.

The Examiner has unilaterally withdrawn claims 34-38 from consideration as being directed to a separate invention and thus subject to an election/restriction requirement. Application traverses this election/restriction on the basis that (a) it is not timely, and (b) with modest amendment of claim 34, applicant has clarified the already clear unity of invention between claims 23-33 and 34-38 and (c) claims 34-38 were added as new claims in applicants' response of March 22, 2004 to the Office Action of October 23, 2003.

More specifically, applicant has clarified claim 34 by making claim 34 depend from claim 23 as being more limited in scope relative to moving the source of UV light by electromechanical means. Also, the limitation, that an item is adhered to at least a portion of the area from which the hydrophobic coating has been removed, has been added to be consistent with claim 23.

Regarding the timing of the election/restriction requirement, applicant would draw the Examiner's attention to 37 CFR 1.142(a) which reads in pertinent part:

"Such requirement will normally be made before any action on the merits, however, it may be made at any time before final action."

By making this election/restriction as part of a final action, and given the fact that claims 34-38 had not been previously considered, the Examiner has effectively precluded the applicant from taking any action whatsoever on these claims. Contrary to the Examiner's statement, applicant has not had an office action on the merits of the claims at issue. Applicant, therefore, respectfully requests withdrawal of the election/restriction requirement and restoration of amended claims 34-38 to active status as pending in the present application.

Applicant notes with appreciation the withdrawal of prior rejections of claims under various references cited in the previous Office Action.

The Examiner has, however, raised a new basis of rejection of claims 23-33, namely an insufficient written description in the specification to support certain amendments to the claims made by applicant in response to the previous Office Action. In particular, the Examiner alleges that support does not exist for the phrase "the surface being exposed to the exterior of the vehicle" in claim 23. While the cited words have been modified somewhat by the currently proposed amendment, the basis of the amendment is simply to clarify that the hydrophobic coating is on the exterior surface of the vehicle glazing.

Accordingly, applicant would draw the Examiner's attention to page 1, paragraph 2, of the specification, which discusses the safety benefits of hydrophobic coatings on a vehicle window when contacted by water. Applicant submits that, logically, the only way such a benefit could accrue is for the hydrophobic coating to be on the surface of the window "exposed to the exterior of the vehicle," where it is contacted by rainfall, road spray, snow and the like, and is quickly shed by the hydrophobic coating to improve the driver's vision through such window.

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Also, paragraph 9 of the attached Declaration under 37 CFR §1.132 indicates that one skilled in the art would understand that a hydrophobic coating would be applied to the exterior surface of a vehicle window.

For these reasons, applicant requests reconsideration of amended claim 23, and requests withdrawal of the §112, first paragraph, rejection.

The Examiner has also rejected claim 26 alleging that there is not adequate support for the water contact being equal to 100°, irradiating for 120 seconds, or the water contact angle after irradiation by UV light being equal to 30 degrees.

With regard to water contact angle, applicant would draw the Examiner's attention to page 5 of the application, paragraph 1, as well as to the test results shown on page 6, Table 1. With regard to the time of irradiation (or exposure) to UV light, the Examiner's attention is drawn to page 4, second paragraph, where a range of time of irradiation between 5 and 120 seconds is disclosed.

Applicant respectfully submits that the specification provides definitive support for the above-noted limitations in the application as noted above, and further notes that the importance of water contact angle and irradiation time is discussed extensively as indicators of the effectiveness of the use of UV light to remove hydrophobic coatings elsewhere in the present application.

Accordingly, applicant respectfully requests reconsideration of claim 26 and withdrawal of the §112, first paragraph, rejection for the reasons described herein.

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The Examiner has rejected claims 24 and 27 under §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. Applicant believes the Examiner intended to apply the rejection to claim 28 rather than claim 27.

Applicant has amended claims 24 and 28 as suggested by the Examiner, replacing the word "or" with the word "and" in each claim. Applicant appreciates the Examiner's suggestion in this regard.

The Examiner has rejected claims 23-24 and 26-33 under 35 U.S.C. 103(a) as being unpatentable over Curtze (US 4,543,283) in view of Tweadey et al. (U.S. 5,131,967).

As a preliminary matter, applicant reiterates the points made in response to the §112, first paragraph, rejection of claim 23 that one skilled in the art would understand that a hydrophobic coating would be applied to the surface of a vehicle window exposed to the exterior surface of the vehicle.

Applicant is particularly familiar with the Curtze reference, as Libbey-Owens-Ford Company is now known as Pilkington North America, Inc., the assignee in the present application. Accordingly, applicant believes it is clear that the Curtze reference is directed to a structure intended to be placed on the surface of a vehicle window exposed to the interior of a vehicle, i.e., the passenger compartment. This location is necessary for the invention of the Curtze reference to fulfill its function as an anti-laceration, anti-ejection shield. The coating noted by the Examiner as having the composition of a hydrophobic coating is present, applicant

submits, as an anti-abrasion coating to minimize scratching of the interior surface during cleaning rather than for any purpose related to possible hydrophobic properties.

One skilled in the art would further recognize that a structure such as is disclosed in the Curtze reference would not be durable enough to withstand the abrasive effects of windshield wipers, snow scrapers and the like to which a structure on an exterior surface would be exposed. (See Declaration, paragraph 8.)

With regard to the Tweadey et al. reference, one skilled in the art would recognize that the purpose of the invention of the Tweadey et al. reference is to provide “a reliable effective and efficient method of improving the environmental durability of laminated glazing units having metal-based transparent, electrically conductive film stacks for solar load reduction and/or electrical heating in view of their potential for edge corrosion resulting from prolonged exposure to certain environmental conditions.” (Tweadey, col. 3, lines 43-49) (emphasis added).

One skilled in the art would understand that hydrophobic coatings are not metal-based, and are therefore not susceptible to corrosion upon exposure to “certain environmental conditions.” To the contrary, hydrophobic coatings are intended to be exposed to the environment and must be in order to fulfill their water-shedding purpose. Therefore, one skilled in the art would not be motivated to use the disclosure of Tweadey et al. to remove non-metal based, non-corrosive coatings from a glass substrate.

For the reasons described herein, applicant respectfully submits that one skilled in the art would not be motivated to look to either the Curtze or Tweadey et al. references individually, or

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in combination to remove hydrophobic coatings from the exterior surface of a vehicle window. Therefore, favorable reconsideration of claims 23-33 is respectfully requested.

The Examiner has rejected claims 23-24 and 26-33 under 35 U.S.C. 103(a) as being unpatentable over Hartig et al. and Curtze.

The Hartig reference is primarily directed to edge deletion of coatings, preferably photocatalytic coatings, in order to improve adhesion of coated glass to a seal/framework that comprise additional components of an insulated glass assembly. The subject published application makes reference to other types of coatings which might be removed but makes only passing reference to methods of edge deletion which might be utilized besides by mechanical grinding, which is preferred. Apart from the "catch-all" phrase "using any other desired coating-removal process", the only methods of edge deletion mentioned are torches and electrical discharge. There is no mention of using short wavelength UV light as a method for removing coatings of any sort.

Additionally, applicant has attached hereto a Declaration under 37 CFR §1.131 which indicates that the date of conception of the present invention is earlier than the earliest filing date (February 8, 2001) of the Hartig et al. reference. Applicant, therefore, submits that the Hartig et al. reference may not be properly cited as prior art against the present application. Withdrawal of the rejection of claims 23-24 and 26-33 as being unpatentable over Hartig in view of Tweadey et al. and Curtze et al. is respectfully requested.

The Examiner has also rejected claim 25 under 35 U.S.C. §103(a) as being unpatentable over Hartig et al., Tweadey et. al., and Curtze, in view of Kizaki et al. For the reasons noted

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above applicant respectfully requests that the rejection of claim 25 be withdrawn as it is believed that Hartig is not properly a reference against the present application.

For all the reasons described herein, applicant respectfully submits that the claims of the present application are distinguishable from, and patentable over, the cited references.

Applicant respectfully submits that the instant amendment places the application in condition for allowance. Accordingly, it is courteously requested that it be entered and the application passed to issue. If, for any reasons, it is found the amendment does not place the application in condition for allowance, it is requested that it be entered as placing the application in better form for appeal.

In the event the Examiner would prefer language other than that set forth in the claims, it is requested that a telephone interview be held to assist in expediting the prosecution of the application.

Respectfully submitted,



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